REVIEWS

Bibliographies on Chaparral and the Fire Ecology of Other Mediterranean Systems. By JON E. KEELEY. California Water Resources Center. University of California, Davis. Report No. 58. 1984. ISSN 0575-4968.

This volume is a collection of separate and non-overlapping bibliographies on ten topics: 1) Chaparral—Evolution and Systematics, 2) Chaparral—Community Structure, 3) Chaparral—Fire and Demography, 4) Chaparral—Morphology and Physiology, 5) Chaparral—Soils and Management, 6) Chaparral—Animals, 7) Seed Germination [California species], 8) California Grasslands, 9) California Forests—Fire and Demography, and 10) Mediterranean Systems—Fire and Demography. Within each bibliography, citations are arranged alphabetically by authors' names.

The first five of the six bibliographies that focus on chaparral contain an impressively comprehensive compilation of the literature. Several major references, however, are missing from the animal bibliography. The inclusion of allelopathy references in the bibliography on seed germination is confusing, especially since the review of allelopathy literature is probably more comprehensive than that on germination (for example, only two of the articles in Seeds of Woody Plants of the United States are cited specifically). Particularly as regards non-chaparral species, there is a wealth of germination literature that is not reflected in this bibliography. The grasslands bibliography also appears reasonably complete, except for the curious omission of any literature on vernal pools. By far the least thorough of the bibliographies is the one on California forests, whose coverage of the literature is spotty at best. This section seems to contain leftovers from the other bibliographies rather than representing a thorough search of its own. It was difficult to decide just what segment of the literature it was intended to represent. I found it particularly annoying that the literature on tree form oaks was apparently randomly split between this section and the chaparral bibliographies. The final section, which contains references for publications on Mediterranean ecosystems outside of western North America, should provide easy access to the international literature, much of which might otherwise be ignored.

The division of this volume into ten separate bibliographies with no cross-referencing is sometimes more of a hindrance than a help. Because there is no overlap between the citation listings, most searches will require paging through a minimum of three or four of the bibliographies to be sure relevant papers are not missed. Although I recognize the effort it would have required, the usefulness of this set of bibliographies would have been enhanced substantially by the addition of a comprehensive subject index.

Despite their weaknesses, these bibliographies should prove an excellent resource for those interested in chaparral. Proofing errors are generally minimal—with the exception that my name is misspelled throughout! The compiler is to be lauded for his attention to frequently ignored early papers and to easily missed master's theses. This completeness should make the bibliographies especially useful—to researchers and to graduate and undergraduate students—as an introduction to a wide body of literature.—SUSAN G. CONARD, USDA Forest Service Forest Fire Laboratory, Riverside, CA.

Insects and Flowers: The Biology of a Partnership. By FRIEDRICH G. BARTH. Translated by M. A. BIEDERMAN-THORSON. ix + 297 pp. Princeton University Press, NJ. 1985. $35. ISBN 0-691-08368-1.

New pollination books and reviews abound. One's first impression of this lively book, *Insects and Flowers,* is that it is a twin to another beautiful book published recently by Bastiaan Meeuse and Sean Morris called (unfortunately) *The Sex Life of*